



confinement magnetic device so that the focused plume discharged from the confinement magnetic device is deflected by a second magnetic field generated by the deflection magnetic device, the second magnetic field causing the charged species in the plume to be deflected towards the substrate on which the charged species are deposited to form the thin film, the deflection magnetic device having a bend incorporated therein for deflecting the charged species away from an axis containing the plume ejection direction and onto the substrate

~~The system of claim 15~~, wherein the confinement magnetic device is formed of a first permanent magnet and a second permanent magnet, each of the first and second permanent magnets having a north (N) pole and a south (S) pole, the first and second permanent magnets being arranged so that the respective north poles oppose one another and the respective south poles oppose one another.

20. (Original) The system of claim 19, wherein the first and second permanent magnets are spaced apart, forming a gap therebetween, the plume being directed into and traveling within the gap from one end of the confinement magnetic device to the other end thereof.
21. (Currently Amended) The system of claim ~~15~~ 19, wherein the deflection magnetic device is formed of a series of spaced magnetic coils, the bend causing the charged species to be deflected onto the substrate which is disposed away from a direct line of sight of the target.
22. (Original) The system of claim 21, wherein the deflection magnetic device is one of a unitary magnet having the series of magnetic coils incorporated therein and a series of separate magnetic coils that are spaced apart from one another.





~~longitudinal length, the first direction being opposite to the second direction, the deflection magnet generating a first magnetic field along its longitudinal length, wherein a second end of the confinement magnet is disposed proximate to the first end of the deflection magnet and the substrate is disposed proximate to the second end of the deflection magnet such that the substrate is axially aligned with the longitudinal bore;~~

~~———— a laser source producing a laser beam that is focused on the target to ablate the target and produce a plume having charged species and neutral species, the plume being influenced by a second magnetic field generated by the confinement magnet, the second magnetic field causing the plume to become more focused, thereby reducing the divergence thereof before the focused plume enters the longitudinal bore of the deflection magnet where the first magnetic field causes the charged species in the plume to be deflected towards the substrate on which the charged species are deposited to form the thin film; and~~

The system of claim 19, further including: means for electrostatically deflecting the charged species within the longitudinal bore of the deflection magnet.